EDITORIAL CORRESPONDENCE.

THE PATENT MODEL SYSTEM.

The following correspondence from Messrs. R. D. O. Smith, of Washington, and H. Howson, of Philadelphia, Patent Solicitors, will be interesting to some of our readers.—ED. C. M. MAGAZINE.

WASHINGTON, D.C., Oct. 30, 1877.

EDS. POLYTECHNIC REVIEW:

I have just read in your issue of the 27th inst., the letter of Jno. Baldwin, and a reply thereto in relation to a proposition to dispensing with models in application for patents. This is a matter of importance, and in view of the fact that strong efforts are to be madeduring the present session of Congress to effect unfriendly legislation on the subject of patterns, too much light cannot be thrown upon the various questions surrounding that subject. In the absence of models, the Patent Office must be furnished with full working drawings; for the law requires that the disclosure of the patentee shall be sufficient to enable a person skilled in that art to construct and work the device without further invention. This would be impossible if every part was not fully shown and described. *In the absence of a model how can the solicitor prepare such drawings*? Clearly he must depend upon data furnished by the inventor. The solicitor, who, from sketches and such crude drawings as inventors usually are able to furnish, can venture to construct working drawings of a machine about which he never heard until yesterday, must have boundless intuition or—boundless cheek. It is difficult enough to avoid errors with a full working machine before one—it would be absolutely impossible to do so without better information than most inventors are able to furnish on paper.

A *very* large proportion of inventors are not mechanics, and a large proportion of those who are mechanics and who are fully able to read drawings, are utterly incapable of constructing working drawings. Yet if models are dispensed with, these men must either forego their patents, so thoroughly study the working drawings that no mistake in details are possible, or—make models.

Very few professional designers are capable of designing a machine of many parts so completely that no changes of detail will be required. How, then, can non-professional people be expected to accomplish this *every time*!

Supposing the models to be abolished, how much would be saved to the applicant?

In the first place, as models are usually constructed—built up piece-meal by the inventor himself—the cost is very much less than would be the cost of fully studied drawings. Secondly, the cost of reproducing these drawings for use in the Patent Office would be vastly in excess of the cost of *sufficient* drawings made from the model. Upon this point I have an experience which is, so far as I know, exceptional. I have directions from a client to take his models apart and prepare detail drawings of every piece. The models furnished by this gentlemau are always miniature duplicates of his machines, and my experience has been that the cost of drawings, such as he orders, pretty nearly approaches the cost of the model. Without the model as a basis, the cost would necessarily be much higher, and then invariably they would include a dangerous element of uncertainty.

But the argument of greatest force is: *the model comes from the inventor's own hands.* There cannot be any question that *it* embraces and illustrates the inventions of *his* brain; very often it has been constructed by his own hands—always under his own direction and supervision. The drawings and specifications are always the product of the hand and brain of another—a second-hand production; and it is manifest the chances of error or omission are infinitely greater in the latter than in the former case.

Unfortunately there are patentees who only desire the patent to trade upon. With them the importance of the invention or validity of the patent is matter of small consideration. *Such* men would be glad te dispense with models. Unfortunately, also, there are solicitors who care as little for either of these considerations, and only desire the highest obtainable fee for the amount of service rendered. Abolition of models would enable them—as it would compel us all—to enlarge *their* charges.

To the honest inventor, and to the solicitor who desires to do his duty conscientiously, there is no gain in dispensing with the models which will not be outweighed a thousand fold by the uncertainties which would be introduced thereby.

The absence of models will increase the cost of the official examinations. No man can read a machine from a drawing as quickly and accurately as from a model.

Without the model, it would be necessary to scrutinize every part of the drawing; with the model, only those parts concerned with the claim need to be examined. Without models a large increase of the examining corps would be required. Upon this point I have made inquiries at the Patent Office, and the examiners are of the opinion that the absence of models would very largely increase their labors, *ergo*, it would necessitate an additional number of examiners.

The work of the office is not materially interrupted, because the examination calls up past inventions which the officers studied *while the models were in existence*, and the new cases have their models as before.

In reference to foreign systems, I can only say that the tendency is to assimilate their practices to ours. The new German law requires models as stringently as ours. In reference to the drawing in British patents, I can only say that some bear the marks of having been prepared from working machines, and those which do not are generally so indefinite and crude that no one could, with any certainty, reproduce the invention in machinery.

It is altogether a mistake to characterize as worthless that which, though obsolete, still marks a step in the history of art. Very many of the destroyed models represent distinctive inventions useful to-day. Very few of them represent inventions which were not useful advances in their time, and very many of them still continue their usefulness in other forms and new connections.

It would indeed be unworthy of a great nation like ours to plead want of space for the storage and exhibition of models, however numerous. The inventors of the United States have supported the Patent Office. They have supplied material for more than one *steal* of fair proportions, and they have in the treasury to their credit now about one million of dollars. Under such circumstances, the plea of *lack of space* is rather small. The inventors are willing to supply all funds needed to enlarge the space as fast as required. The Patent Office is the only bureau of the Government which *pays its own way*, and has never called upon Congress for a cent. It is time Congress should cease treating it as a pauper.

R. D. O. SMITH.

EDITORS OF THE POLYTECHNIC REVIEW:

Gentlemen—I am under obligations to you for advance sheets of a communication from a Washington Solicitor, in reply to my article on Patent Office models published in your last issue, and for permission to answer the communication in question, on perusing which my attention was first attracted to the italicized word *sufficient* in the following sentence:

"Secondly, the cost of reproducing the drawings (described as '*fully studied drawings*') for use in the Patent Office would be vastly in excess of the cost of *sufficient* drawings made from the model."

What meaning is to be attached to the word *sufficient* in the above connection?

Viewed in the light afforded by other parts of the paper, the author's meaning must be this, that a comparatively cheap and incomplete drawing, which in connection with a model, will *suffice* to illustrate an invention and, in connection with the specfication, will be *sufficient* to instruct the Examiner, will not *suffice* for their purposes without the aid of a model, in the absence of which more expensive and "fully studied" drawings would be required. There could be no more forcible argument than this in favor of abandoning the model system.

The law requires that the specification of which the drawing forms a part, shall be sufficiently clear and exact to enable those skilled in the art to make the invention. The model is a matter totally apart from the patent, which must not contain any reference to the model, and in this connection it must be remembered that the law makes the requiring of a model optional with the Commissioner.

If a patent cannot be interpreted without the aid of the model deposited with the application, it will be an invalid patent. If an attorney files an application the drawings of which are so far from being "well studied" that the patent cannot be understood without the aid of the model, that attorney is imposing on his client.

Two reasons are advanced in the communication in favor of the continuance of the model system. One is that the models afford to attorneys facilities for preparing applications; the other is that they enable the Examiners to perform their duties efficiently and promptly.

Let me attend to the second reason first.

It is stated by the author of the communication that he has conferred with the Examiners, who are of opinion that the absence of models *would very largely increase their labors.* For